3. Order No. (s)	TECHNICAL ACTION REQUEST	1. Request No. 22
PSC 148 UNV		2. Date 1-4-54

4. Contractor [redacted] 5. Address [redacted] 25X1

6. Sub-Contractor 7. Address

8. Equipment RP-6 9. Quantity Affected Remainder of Order

10 Purpose

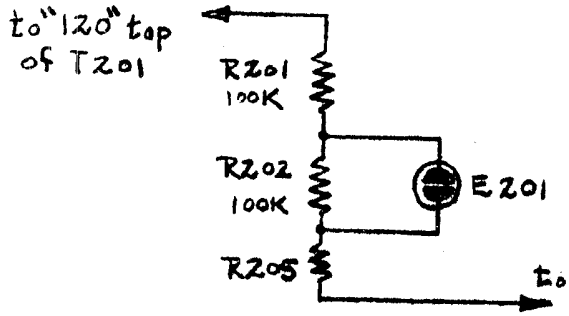
☐ Deviation Approval ☐ Interpretation ☐ Information ☒ Recommendation

11. Approval will affect,

Price (Increase-Decrease) Delivery Interchangeability

ACTION I

Approval is requested to alter the neon lamp voltage divider network in the RP-6 as follows:



The added resistor R205 is to be a 1/2 watt 5% carbon resistor whose value is to be determined as a phasing operation.

The neon lamp (E201) is to be changed from a yellow coded bulb (465K116) to a red coded bulb (465K115).

This proposed change will reduce the number of rejects and tend to increase the reliability of the unit because finer control can be obtained over the voltage required across the network to fire the neon bulb.

The change of neon lamps from yellow coded to red coded is desirable for two reasons: (1) The use of the red coded bulbs permits the addition of R-205 without the necessity of changing the remainder of the network and (2) the red coded bulbs occur in a region of greater population density in the normal distribution curve permitting a greater yield of usable bulbs from stock.

Delivery and interchangeability will not be affected. A price change may be necessary and will be submitted by the contractors contract division when costs have been accurately determined.

[redacted]

3-7169
30
C

[redacted] 25X1 25X1

Project Engineer

3. Order PSC 148 UNV	TECHNICAL ACTION REQUEST	4. Request No. 22
		5. Date 1-4-54

4. Contractor [redacted] 25X1

6. Sub-Contractor [redacted] 7. Address

8. Equipment RP-6

9. Quantity Affected Remainder of order

10 Purpose

☐ Deviation Approval ☐ Interpretation ☐ Information ☒ Recommendation

11. Approval will affect,

Price (Increase-Decrease) ~~Deliveries~~ ~~Interchangeability~~

ACTION I

Navy Inspector Endorsement:

[redacted] 25X1

Plant Supervisor #114

[redacted] 25X1

ACTION III

Technical change approved.

Approved by: [redacted] 25X1

For the Government

3. Originator [redacted] ASC [redacted] USN	TECHNICAL ACTION REQUEST	12 Request No. 23
4. Contractor		2. Date 1-28-54
5. Sub-Contractor	7. Address	25X1
6. Equipment RR-6A,	9. Quantity Affected Entire Order	

10. Purpose
☒ Deviation Approval ☐ Interpretation ☐ Information ☐ Recommendation

11. Approval will affect,
x Price (Increase-Decrease) Delivery . Interchangeability

ACTION I

Approval is requested to make the following change in the RR-6A:

Add a .001 ufd ceramic disc capacitor (to be designated C-58) from pin 5 to V7 to ground. This capacitor is intended as a bypass for the 330 ohm cathode resistor (R-27). 921R142 will be the contractors part number.

The purpose of this change is to improve operation of the crystal calibrator of frequencies above 17 Mc. While none of the submitted prototypes had a .001 ufd capacitor used in the aforementioned location, there is sufficient reason to believe that trouble will be encountered in production unless the output of the crystal calibrator can be increased.

Please note: This is the first TAR to be submitted on the RS-6A. The numbering of TAR's will follow with the RS-6 due to the close tie-in of equipments.

Delivery and interchangeability will not be affected. Due to the added component a price increase will be necessary and will be submitted by the contract division when costs have been accurately determined.

[redacted] 25X1

Project Engineer

ACTION II

Navy Inspector Endorsement:

[redacted] 25X1

Plant Supervisor [redacted] 25X1

ACTION III [redacted] 25X1

Technical change approved.

For the Government

3. Order No. (s) PSC 114 UNV 184	SECRET TECHNICAL ACTION REQUEST	1. Request No. 24
		2. Date 3-1-54
4. Contractor [redacted]		25X1
6. Sub-Contractor	7. Address	
8. Equipment RS-6A	9. Quantity Affected Entire Order	

10 Purpose

☐ Deviation Approval ☐ Interpretation ☐ Information ☐ Recommendation

11. Approval will affect,

Price (Increase-Decrease) [redacted]

ACTION I

It is requested that the present Telex ear piece and cord designated as HS-301 and W303 respectively, with [redacted] part numbers 430B101 (cord) and 450B101 (ear piece) be deleted from the equipment RS-6A and a Telex double ear set be substituted carrying the new designation numbers HS302, HS303 for the ear pieces and W306 for the "Y" cord. The Telex numbers are #4644 for each ear piece and #8694 for the 5 ft. "Y" cord. The total assembly carries the Telex No. 8695. 25X1

The equivalent [redacted] part numbers will be #450B102 for each ear piece and #430B146 for the "Y" cord. 25X1

[redacted] 25X1

Project Engineer

ACTION II

Navy Inspector Endorsement:

[redacted] 25X1

Plant Supervisor #114

[redacted] 25X1

ACTION III

[redacted] 25X1

Approved by
For the government

SECRET

3. Order No. (s) PSC XXX UNV 184	TECHNICAL ACTION REQUEST SECRET	25
		2. Date 3-1-54

4. Contractor [redacted] 25X1

5. Sub-Contractor | 7. Address

8. Equipment RS-6A | 9. Quantity Affected Entire Order

10 Purpose

☐ Deviation Approval ☐ Interpretation ☐ Information ☐ Recommendation

11. Approval will affect,

Price (Increase-[redacted]) Delivery [redacted]

ACTION I

The suppliers on the "6XL" tube used in the RP-6 unit in both the RS-6 and RS-6A equipment have changed the design of the subject tube to a ruggedized version carrying the tube designation "6XLW." It is proposed that we use this tube as soon as available. There will be a price increase involved.

Interchangeability and delivery will not be affected.

[redacted] 25X1

Project Engineer

ACTION II

Navy Inspector Endorsement:

[redacted] 25X1

Plant Supervisor #114

[redacted] 25X1

ACTION III

[redacted] 25X1

Approved by
For the Government

3. Order No. (if any) 148 PSC UNV	TECHNICAL ACTION REQUEST	26
		2. Date 3-30-54

4. Contractor [redacted] 25X1

6. Sub-Contractor

8. Equipment RR-6

9. Quantity Affected

10 Purpose

☒ Deviation Approval ☐ Interpretation ☐ Information ☐ Recommendation

11. Approval will affect,

Price (Increase-Decrease) Delivery Interchangeability

ACTION I

Approval is requested to change section 4.4.3.5 in Specification No. 50-K-1006A regarding the range of the fiduciary.

The statement regarding the ability of the fiduciary, made in TAR #20, is in error regarding its workable range. The range of the fiduciary will not correct the present calibration deviations.

The design of the fiduciary limits its travel as shown in the table below.

DIAL CALIBRATION ACCURACY AND FIDUCIARY RANGE.

Low Band				High Band			
Frequency	Allowable Error +		Allowable Error -	Frequency	Allowable Error +		Allowable Error -
3.0 mc	10	± 25 kc	8	6.5 mc	20	± 50 kc	10
3.5 mc	15	± 25 kc	10	7.0 mc	30	± 50 kc	15
4.0 mc	22	± 25 kc	18	7.5 mc	35	± 50 kc	20
4.5 mc	33	± 25 kc	21	8.0 mc	40	± 50 kc	25
5.0 mc	49	± 25 kc	29	8.5 mc	50	± 50 kc	30
5.5 mc	51	± 25 kc	35	9.0 mc	60	± 50 kc	35
6.0 mc	60	± 25 kc	40	9.5 mc	70	± 50 kc	45
6.5 mc	55	± 50 kc	40	10.0 mc	75	± 50 kc	50
				10.5 mc	85	± 50 kc	55
				11.0 mc	100	± 50 kc	60
				11.5 mc	110	± 50 kc	70
				12.0 mc	125	± 100 kc	60
				12.5 mc	135	± 100 kc	75
				13.0 mc	145	± 100 kc	80
				13.5 mc	140	± 100 kc	90
				14.0 mc	140	± 100 kc	100
				14.5 mc	125	± 100 kc	95
				15.0 mc		± 100 kc	75

[redacted] 25X1

Project Engineer

SECRET

3. Order No. (S) PSC 118 UNV 194	TECHNICAL ACTION REQUEST	26
4. Contractor		2. Date
6. Sub-Contractor		7. Address
8. Equipment RR-6		9. Quantity Affected

10 Purpose

☒ Deviation Approval ☐ Interpretation ☐ Information ☐ Recommendation

11. Approval will affect,

Price (Increase-Decrease) Delivery Interchangeability

ACTION II

Navy Inspector Endorsement:

25X1

Plant Supervisor #114

25X1

ACTION III

Approved by:

Not approve

25X1

For the government

25X1

SECRET

3. Order No. (s)	SECRET TECHNICAL ACTION REQUEST	1. Request No. 27
PSC 148 UNV 184		2. Date 4-1-54

4. Contractor	5. 25X1
6. Sub-Contractor	7. Address
8. Equipment RR6A	9. Quantity Affected

10 Purpose

☒ Deviation Approval ☐ Interpretation ☐ Information ☐ Recommendation

11. Approval will affect,

Price (Increase-Decrease) Delivery Interchangeability

ACTION I

Approval is requested to write into the pertinent specification on the RR6A Receiver, the actual travel of the fiduciary mark. The fiduciary corrects calibration error only at certain frequencies.

The design of the fiduciary limits its travel as shown in the table below.

Low Band

Frequency	Fiduciary Calibration limits Fiduciary Travel +	Dial Allowable Error	Travel -
4.5 MC	15 KC	25 KC	10 KC
5. MC	20 KC	25 KC	12 KC
6. MC	35 KC	25 KC	25 KC
7. MC	60 KC	50 KC	35 KC
8. MC	75 KC	50 KC	65 KC
9. MC	100 KC	50 KC	70 KC
10. MC	100 KC	50 KC	70 KC

High Band

Frequency	Fiduciary Calibration limits Fiduciary Travel +	Dial Allowable Error	Travel -
10 MC	40 KC	50 KC	20 KC
11 MC	40 KC	50 KC	30 KC
12 MC	65 KC	50 KC	40 KC
13 MC	70 KC	50 KC	40 KC
14 MC	90 KC	50 KC	65 KC
15 MC	110 KC	100 KC	75 KC
16 MC	140 KC	100 KC	85 KC
17 MC	150 KC	100 KC	100 KC
18 MC	160 KC	100 KC	150 KC
19 MC	160 KC	100 KC	160 KC
20 MC	210 KC	100 KC	140 KC
21 MC	215 KC	100 KC	140 KC
22 MC	100+KC	100 KC	140 KC

25X1

Project Engineer

SECRET

3. Order No. (s)	SECRET TECHNICAL ACTION REQUEST	1. Request No. 27
PSC XX8 UNV 194		2. Date 4-1-54

4. Contractor 25X1

6. Sub-Contractor	7. Address
8. Equipment RR6A	9. Quantity Affected

10 Purpose

☒ Deviation Approval ☐ Interpretation ☐ Information ☐ Recommendation

11. Approval will affect,

Price (Increase-Decrease) Delivery Interchangeability

ACTION II

Navy Inspector Endorsement:

25X1

Plant Supervisor #114

25X1

ACTION III

Approved by:

See TAR #32

Not approved

For the government

SECRET

3. Order No. (s) 148 PSC 148 UNV 148	SECRET TECHNICAL ACTION REQUEST	1. Request No. 28
		2. Date 4-1-54

4. Contractor [redacted] 25X1

6. Sub-Contractor | 7. Address

8. Equipment RR6 | 9. Quantity Affected

10 Purpose

☒ Deviation Approval ☐ Interpretation ☐ Information ☐ Recommendation

11. Approval will affect,

Price (Increase-Decrease) Delivery Interchangeability

ACTION I

Approval is requested to change section 4.6.15 in specification No. 50A-1006A regarding the oscillator frequency pulling with variation in gain control setting.

With the latest improvement in lead dressing, we find that a maximum shift of 10 KC with gain control setting is a realistic production figure. We are asking for a maximum shift of 10 KC.

The following table of information shows the results of a pilot run of 25 receivers.

Gray lead dress on 25 units to check osc. pull with volume control setting.

UNIT	MAXIMUM	MINIMUM DIAL DIV.	BEFORE OSC. PULL	AFTER DRESS OSC. PULL
7110	4419.1	4416.7	4 KC	
7109	"	4417.9	2 KC	
7111	"	4417.8	2.2 KC	
7106	"	4415.7	5.7 KC	
7107	"	4417.3	3.0 KC	
7119	4420	4422	4 KC	
7116	"	4422.7	5.4 KC	
7114	"	4422	4 KC	
7112	"	4421.6	3.2 KC	
7115	"	4422.3	4.6 KC	
7117	"	4422.6	5.2 KC	
7121	"	4429.2	18.4 KC	8.4 KC
7118	"	4423	6 KC	
7125	"	4422.2	4.4 KC	
7123	"	4424.0	8 KC	
7122	"	4425.5	11 KC	4 KC
7127	"	4420.7	1.4 KC	
7082	4422.5	4421.1	2.67 KC	
7080	"	4420.7	3.43 KC	2 KC
7083	"	4415.1	14.1 KC	6.6 KC
7086	"	4420.8	3.2 KC	
7081		4419.0	6.6 KC	2.42 KC
7079		4421.5	1.9 KC	
7085		4421.7	1.5 KC	
7087		4419.6	5.5 KC	2.2 KC
7084		4421.7	1.5 KC	

[redacted] 25X1

SECRET Project Engineer

SECRET

3. Order No. (s) 148 PSC ~~145~~ UNV 191	TECHNICAL ACTION REQUEST	1. Request No. 28
		2. Date 4-1-54

4. Contractor [redacted] 25X1

6. Sub-Contractor

8. Equipment RR6	9. Quantity Affected

10 Purpose

☒ Deviation Approval ☐ Interpretation ☐ Information ☐ Recommendation

11. Approval will affect,

Price (Increase-Decrease) Delivery Interchangeability

ACTION II

Navy Inspector Endorsement:

[redacted] 25X1

Plant Supervisor #114

[redacted] 25X1

ACTION III

Approved by:

Not approved

For the government

[redacted] 25X1

SECRET

3. Order No. (s) PSC 148 UNV 184	TECHNICAL ACTION REQUEST	1. Request No. 29
		2. Date May 3, 1954
4. Contractor [redacted] 25X1		
6. Sub-Contractor		7. Address
8. Equipment RR-6A		9. Quantity Affected All

10 Purpose

☒ Deviation Approval ☐ Interpretation ☐ Information ☐ Recommendation

11. Approval will affect,

No Price (Increase-Decrease) No Delivery No Interchangeability

ACTION I

SUBJ: Calibration Oscillator

Request Permission: (1) To change frequency of calibration crystal at present 500 KC to become 1 Meg.

Request Permission: (2) With either present crystal (500 KC) or 1 Meg crystal (if allowed) to test the calibration crystal, with the receiver antenna disconnected.

Reason: (1) The present 500 KC crystal note at its higher harmonics can be readily detected if Antenna is not used. The use of Antenna introduces extraneous noises and results in difficulty in determining desired audible beat.

[redacted] could, on a running basis change, substitute the 1 Meg. calibration crystal thereby providing notable increased strength of beat note. It must, however, be pointed out that the 1 Meg. crystal will provide check points for dial calibration at only each 1 Meg. mark. The instruction book would be modified accordingly. 25X1

[redacted] 25X1

Project Engineer

ACTION II

Navy Inspector Endorsement:

[redacted] 25X1

Plant Supervisor #114

[redacted] 25X1

ACTION III

Approved by:

The 500 KCS calibration crystal shall continue to be used, and may be checked with antenna disconnected.

[redacted] 25X1

for the government

3. Order No. (s)	TECHNICAL ACTION REQUEST	1. Request No. 30
PSC 118 UNV 184		2. Date May 3, 1954
4. Contractor		5. Address 25X1
6. Sub-Contractor		7. Address
8. Equipment RS-6A		9. Quantity Affected

10 Purpose

☒ Deviation Approval ☐ Interpretation ☐ Information ☐ Recommendation

11. Approval will affect,

No Price (Increase-Decrease) No Delivery No Interchangeability

ACTION I

SUBJ: "Hook-Up" decal in Filter-Accessory Unit RA-6.

Request Permission: To use decal [redacted] #433A110 identical to that previously used for RS-6 equipment. 25X1

Reason: (1) [redacted] has purchased and has in stock production quantities of #433A110 decal 25X1 which do not reference RR-6A and RT-6A on the "Hand Generator Operation Hook-Up", the "AC Operation Hook-Up" nor the "Battery Operation Hook-Up" diagram of this decal. All reference is to RR-6 and RT-6 respectively.

(2) The use of the previous type decal (433A110) will make the Filter Accessory Unit RA-6 identical in all respects to those previously delivered with RS-6 equip.

(3) If it is mandatory to reference RR-6A and RT-6A it is requested Motorola be allowed to accomplish this by affixing a small additional decal directly below the "Hook-Up Diagrams" decal (433A110) on the inside of the Filter Cover bearing the following wording: "RT-6 and RR-6 above may alternately be RT-6A and RR-6A respectively".

[redacted] 25X1

Project Engineer

ACTION II

Navy Inspector Endorsement:

[redacted] 25X1

Plant Supervisor #114

[redacted] 25X1

ACTION III

Approved by:

[redacted] 25X1

For the government

SECRET

3. Order No. (s) PSC 118 UNV 184	TECHNICAL ACTION REQUEST	1. Request No. 31
		2. Date May 27, 1954
4. Contractor	5. Address	25X1
6. Sub-Contractor	7. Address	
8. Equipment RS-6A	9. Quantity Affected All	

10 Purpose

☒ Deviation Approval ☐ Interpretation ☐ Information ☐ Recommendation

11. Approval will affect,

No Price (Increase-Decrease) No Delivery No Interchangeability

ACTION I

SUBJECT: Review of pilot run of 25 equipments RS-6A.

1. This TAR is initiated to permit [redacted] to commence RS-6A production without any i25X1 ruption to his production line facilities. It is understood by [redacted] and the Government 25X1 that this TAR is to be temporary and further that the initial 50 production units will be the subject of an engineering investigation by Motorola.

2. The object of the engineering investigation shall be to improve the operational characteristic of the equipment in production, without redesign, on which firm amendments to the equipment specifications may be authorized.

PARAGRAPHS 1 & 2 ABOVE ARE THOSE OF GOVERNMENT REPRESENTATIVE, [redacted] 25X1

3. Monday and Tuesday, May 24th and 25th, a meeting was held at [redacted] to discuss th 25X1 lot run evaluation and resolve certain limits to allow [redacted] to proceed with production 25X1 be subject equipment. Reference is made to the tentative specifications covering the RS-6A as submitted by [redacted] and approved with provisions by a letter dated 2 February 1954, signed 25X1 by [redacted], representing the Government. 25X1

4. Pilot run data indicated certain relaxations were in order and the following agreements were reached at this meeting. The meeting was attended by [redacted] 25X1 representing the Government, and [redacted] 25X1 representing [redacted] 25X1

a. Spec. paragraph 5.3.4 Power Output Transmitter RT-6A

Until such time as a chart for the power output at the various test frequencies can be established, [redacted] is to work against the limits as follows: AC operation minim[redacted] of 25X1 4.5 watts with regulated plate voltage, 400 V DC. Although not resolved at the meeting, it is requested that we be allowed a plate current not to exceed 80 ma in place of the previous 75 ma. DC operation, 3.5 watts with 5.7 V filament input. In order to meet the power output requirement with AC operation, with specified regulated plate voltage, it is necessary 25X1 measure the power output from regulated test panel supply source as part of the phasing operation. Therefore, inability of any transmitter to meet the specified power output requirement when working with its own equipment power supply is not to be a basis for rejection regarding power output. It is to be permissible to use the 10 MC low position as the basis for acceptance of units regarding Power Output at 10 MC.

ILLEGIB

ACTION I (Contd)

b. Spec. paragraph 4.4.3.5 Receiver RR-6A Dial Calibration

Receivers with dial calibration errors not in excess of that which can be corrected by the fiduciary action are to be accepted provided the maximum dial allowable error does not exceed that as previously approved by TAR #20 for the RS-6 equipment. One of the stipulations of these approvals is that [redacted] will use the Radio Condenser variable capacitors as supplied to the production line and from the vendor. Data is to be taken for dial calibration error for a group of 50 equipments for the Government's evaluation. [redacted] is authorized to knife gangs after ordinary data taken, if necessary, in order to bring into limits which can be corrected by the fiduciary action and allowable dial calibration error. 25X1 25X1

c. Spec. paragraph 4.6.3.1 Receiver RR-6A Signal to Noise Ratio

[redacted] is to use the present spec. limit of 2.0 uv for AM. It is evident from the pilot run data that the equipments measured and by the method of measurement that the u[redacted] failed to pass this requirement. It has been established that the high signal to noise ratio of the pilot run is attributing to the 60 cycle hum. Therefore, it will be permissible to record the signal to noise ratio as that actual noise remaining after the deducted measured 60 cycle hum. As an alternate method [redacted] is also permitted to measure signal to noise with the use of an auxillary filter to eliminate the 60 cycle hum. 25X1 25X1

d. Spec. paragraph 4.6.7.1 Receiver RR-6A Image Rejection Ratio

The present tentative specifications for RS-6A, paragraph 4.6.7.1, sub-paragraphs A, B, and C are to apply. Sub-paragraph D is to be revised to allow a limit of 20 db measured at 22 megacycles. [redacted] is to record and submit data for the first 50 units of production to allow resolving the permanent spec. limit by the Government. 25X1

e. Spec. paragraph 4.6.8.1 Receiver Oscillator RR-6A Oscillator Radiation

[redacted] is to work against radiation limits as follows: High band 40,000 microvolts; low band, 15,000 microvolts. This check is to be a 1% type for production equipments. 25X1

f. Spec. paragraph 4.6.15 Receiver RR-6A Oscillator Frequency Pulling

[redacted] is to use a limit of 4 KC at 19 ma. This data per 50 units is to be recorded and submitted to the Government for evaluation in order to resolve the permanent spec. limit. 25X1

25X1

[redacted]

25X1

Page - 2 -

Project Engineer

3. CONTRACT NO.(S) PSC 184 UNV	TECHNICAL ACTION REQUEST SHEET 1 OF 4 SHEETS	1. REQUEST NO. 32
4. SPECIFICATION NO.(S)		2. DATE 1 July 1954
5. CONTRACTOR [redacted]		25X1 25X1
7. SUB-CONTRACTOR	8. ADDRESS	
9. EQUIPMENT RS-6A	10. QUANTITY AFFECTED All	

11. PURPOSE: ☒ DEVIATION APPROVAL ☐ INTERPRETATION ☐ INFORMATION ☐ RECOMMENDATION

12. APPROVAL WILL AFFECT: NO PRICE (INCREASE-DECREASE); NO DELIVERY; NO INTERCHANGEABILITY:
(If Price, Delivery or Interchangeability is Affected, Explain Below)

CAUTION: INCREASE IN PRICE AND/OR CHANGE IN CONTRACT DELIVERY SCHEDULE REQUIRES APPROVAL OF THE CONTRACTING OFFICER.

ACTION 1

SUBJECT: Changes in RS-6A equipments and specifications after submission of pre-production models.

1. It is the purpose of this TAR to consolidate on one document, the various changes and agreements reached with the customer.

2. All of the points discussed below have been previously requested either by TAR action or by phone conversation, but since the original requests were made and the approval verbally received did not necessarily mean the request was approved exactly as presented. It is requested that confirmation of the following points be given by an additional action to this TAR.

3. Power Output: Transmitter RT-6A (Specification Paragraph 5.3.4)

a. A.C. Operation: The following table of power output, in watts, vs. frequency in megacycles, shall apply when operated from power supply RP-6, set at 120 V Position and with 120 V AC input to RP-6.

Freq. Mc.	Band	75 OHMS	150 OHMS	300 OHMS	600 OHMS	1200 OHMS
4.5	Low	5.5	6.0	5.5	6.0	6.0
7.0	"	8.0	8.0	7.0	7.0	7.5
9.0	"	8.5	8.5	7.0	7.0	7.5
10.0	"	8.5	8.5	7.0	7.0	7.0
10.0	High	5.0	5.5	5.0	5.5	5.0
14.0	"	6.0	7.0	7.0	7.0	6.5
16.5	"	5.5	6.5	6.5	6.5	6.5
21.0	"	5.0	7.0	6.5	6.0	6.0

b. D. C. Operation: The following table of power output, in watts, vs. frequency, in megacycles, shall apply when operated from power supply RP-6, in the D.C. position and with the input voltage set at 5.7 V. (measured at the

3. CONTRACT NO.(S) PSC 184 UNV	TECHNICAL ACTION REQUEST	1. REQUEST NO. 32
4. SPECIFICATION NO.(S)	SHEET 2 OF 4 SHEETS	2. DATE 1 July 1954

vibrator):

Freq. Mc.	Band	75 OHMS	150 OHMS	300 OHMS	600 OHMS	1200 OHMS
4.5	Low	4.5	4.5	4.5	4.5	5.0
7.0	"	6.0	6.5	5.5	6.0	6.5
9.0	"	7.0	7.0	6.0	6.0	6.0
10.0	"	7.0	7.0	6.0	5.5	5.5
10.0	High	3.5	4.5	4.0	4.5	4.0
14.0	"	5.0	6.0	5.5	5.5	5.5
16.5	"	4.5	5.5	5.0	5.5	5.0
21.0	"	4.5	6.0	5.0	5.0	5.5

c. In order to guarantee the 5 W minimum it was necessary to modify Xmtr circuit as follows:

(1) * Tube V101 Osc. type 6AG5 changed to 6AK6.
(2) Tube pin 2 (suppressor grid) grounded.
(3) Resistor R112 (1200 ohms) changed to 6800 ohms.
(4) Capacitor C102 (47 mmf) changed to 15 mmf.
(5) Capacitor C106 (5mfd) changed to 0.5 mfd.

*Tube type change was acknowledged by letter dated 10 June 1954.

It is agreed that [redacted] engineering department and the customer engineering department will jointly study methods of improving the keyed wave form. At such time as a mutual agreement can be reached for the circuit improvements these revisions will be incorporated in production on a running change basis. 25X1

4. Receiver RR-6A Dial Calibration (Specification Paragraph 4.4.3.5)

The dial calibration error shall not be in excess of that specificied in the following table.

Low Band

Frequency MC	Allowable Dial Errors + KC	- KC
4.5	15	10
5.0	20	12
6.0	25	25
7.0	50	35
8.0	50	50
9.0	50	50
10.0	50	50

3. CONTRACT NO.(S) PSC 184 UNV	TECHNICAL ACTION REQUEST	1. REQUEST NO. 32
4. SPECIFICATION NO.(S)	SHEET # 3 OF 4 SHEETS	2. DATE 1 July 1954

High Band

Frequency	Allowable Dial Errors	
MC	± KC	- KC
10	40	20
11	40	30
12	50	40
13	50	40
14	50	50
15	100	75
16	100	85
17	100	100
18	100	100
19	100	100
20	100	100
21	100	100
22	100	100

5. Receiver RR-6A Signal to Noise Ratio (Specification Paragraph 4.6.3.0)

[redacted] is to use the present spec. limit of 2.0 uv for AM. It is evident fr 25X1 the pilot run data that the equipments measured and by the method of measurement that the units failed to pass this requirement. It has been established that the high signal to noise ratio of the pilot run is attributed to the 60 cycle hum. Provided that the hum level, with volume control set at minimum gain position, does not exceed 0.140 volts, it will be permissible to record the signal to noise ratio as that actual noise remaining after the deducted measured 60 cycle hum. As an alternate method Motorola is also permitted to measure signal to noise with the use of an auxiliary filter to eliminate the 60 cycle hum.

6. Receiver RR-6A Image Rejection Ratio (Specification Paragraph 4.6.7.1)

The limits as listed in "Tentative Specification for RS-6A" except item a changed from 55 db to 53 db and as approved by letter dated 2 February 1954 are to apply as follows.

(a) Low frequency end of low band: 53 db
(b) High frequency end of low band: 35 db
(c) Low frequency end of high band: 40 db
(d) 22 MC 25 db

In order to meet the 22 Mc, 25 db requirement it has been necessary for Motorola to incorporate the following receiver circuit changes.

(1) Cathode to ground Resistor R6 (at VI, Tube Type 5899) 120 ohm changed to 150 ohms.

(2) Resistor R6 (150 ohms) shunted by added capacitor C59 33 mmf.

3. CONTRACT NO.(S)	TECHNICAL ACTION REQUEST	1. REQUEST NO.
NSC 184 [illegible]	SHEET 4 OF 4 SHEETS	32
4. SPECIFICATION NO.(S)		2. DATE
		1 July 1954

7. Receiver RR-6A Oscillator Radiation (Specification Paragraph 4.6.8.1)

Radiation measurement to be made in accordance with Spec. MIL-I-16910 (Ships). Limit of 40,000 microvolts for high band and 15,000 microvolts low band to apply. This check is to be made on a 1% basis for production equipments.

8. Peceiver RR-6A Oscillator Frequency Pull (Specification Paragraph 4.6.15)

A limit of 4 KC at 19 MC is to apply.

9. Receiver Sensitivity (Specification Paragraph 4.6.2.1)

Paragraph 4,6,2,1 of the specification to be modified to read: The ratio of the sensitivity variation in the high band is not to exceed 4.5 to 1.

[redacted] 25X1

Project Engineer

ACTION II

Navy Inspector Endorsement:

[redacted] 25X1

Plant Supervisor #114

[redacted] 25X1

ACTION III

Approved by:

[redacted] 25X1

3. Order No. (s) PSC 1118 UNV -281	TECHNICAL ACTION REQUEST	32
		2. Date 1 July 1954 Action I, II, III 20 July 1954 Action IV, V, VI
4. Contractor		5. Address 25X1
6. Sub-Contractor		7. Address
8. Equipment RS-6A		9. Quantity Affected See Below

10 Purpose

☒ Deviation Approval ☐ Interpretation ☐ Information ☐ Recommendation

11. Approval will affect,

No Price (Increase-Decrease) No Delivery No Interchangeability

ACTION IV

Subject: Transmitter RT-6A Power Output.

1. The following is in confirmation of long distance telephone call between 25X1 of and representing the customer. It is requested approval be given for the new table (per Paragraph 4 below) of Power Output vs. Frequency in lieu of that specified by Action I, Paragraph 3. 25X1

2. This approval is to apply for a minimum of 1,000 units while continued study by 25X1 will be made in an concentrated effort to increase the power output and still meet all other applicable specifications.

3. It is also requested approval be given to allow a maximum of 80 mils to replace the present 75 mils limit specified by specification paragraph 5.3.2 as the total plate and screen current.

4. Power Output: Transmitter RT-6A (Specification Paragraph 5.3.4)

a. AC Operation: The following table of power output in watts, vs. frequency in megacycles, shall apply when operated from Power Supply RP-6, set a 120 V Position and with 120 V AC input to RP-6.

FREQ. MC	BAND	75 ohms	150 ohms	300 ohms	600 ohms	1200 ohms
4.5	Low	5.5	5.0	5.0	5.0	5.5
7.0	"	7.5	7.5	7.0	6.5	7.5
9.0	"	7.5	7.5	7.0	6.5	7.5
10.0	"	7.5	7.5	7.0	6.5	6.5
10.0	High	5.0	5.0	5.0	5.0	5.0
14.0	"	6.0	7.0	6.5	6.5	6.5
16.5	"	5.0	6.0	6.0	6.0	5.5
21.0	"	5.0	6.5	5.5	5.5	5.5

b. DC Operation: The following table of power output in watts, vs. frequency in megacycles, shall apply when operated from Power Supply RP-6, in the DC Position and with the input voltage set at 5.7 V (measured at the vibrator).

(continued next page)

3. Order No. (s) PSC 118 UNV 294	TECHNICAL ACTION REQUEST	1. Request No. 32
		2. Date 1 July 1954 Action I, II, III 20 July 1954 Action IV, V, VI
4. Contractor		5. 25X1
6. Sub-Contractor		7. Address
8. Equipment RS-6A		9. Quantity Affected See Below

10 Purpose

☒ Deviation Approval ☐ Interpretation ☐ Information ☐ Recommendation

11. Approval will affect,

No Price (Increase-Decrease) No Delivery No Interchangeability

ACTION IV (contd)

FREQ. MC	BAND	75 ohms	150 ohms	300 ohms	600 ohms	1200 ohms
4.5	Low	4.5	4.5	4.5	4.5	5.0
7.0	"	5.0	6.0	5.5	6.0	6.5
9.0	"	6.5	6.5	5.5	6.0	6.0
10.0	"	6.0	6.5	5.0	5.5	5.5
10.0	High	3.5	4.5	4.0	4.0	4.0
14.0	"	4.5	6.0	4.5	5.5	5.5
16.5	"	4.0	5.0	4.5	4.5	4.5
21.0	"	4.0	5.5	4.5	4.5	4.5

MOTOROLA, INC.

25X1

Project Engineer

ACTION V

Navy Inspector Endorsement:

25X1

Plant Supervisor #114

ACTION VI

25X1

Approved by:

Action IV is approved except for Paragraph 2. A maximum of 1000 sets (serial nos. 8001-9000) shall be governed by Action IV. All others shall be governed by Action I.

25X1

For the Government

CONFIDENTIAL

3. Order No. (s) [redacted] UNV [redacted] 34	TECHNICAL ACTION REQUEST	1. Request No. 33
		2. Date July 29, 1954
4. Contractor [redacted]	5. [redacted]	25X1 nois
6. Sub-Contractor	7. Address	
8. Equipment RS-6A	9. Quantity Affected All	

10 Purpose

☒ Deviation Approval ☐ Interpretation ☐ Information ☐ Recommendation

11. Approval will affect.

No Price (Increase-Decrease) No Delivery No Interchangeability

ACTION I

SUBJECT: Approval to change value of R108 in Transmitter.

1. Recent production of majority of equipments has indicated still marginal condition of transmitter in meeting the revised power output requirements of TAR #32, Action IV.

2. Transmitters failing to meet requirements yield additional .25 to .5 watt with cathode resistor R108 (previously 270 ohms) changed to 240 ohms. The slightly increased current is still within the approved limit of 80 mils.

3. Approval to incorporate the new value of 240 ohms for R108 is therefore requested.

4. The circuit diagram accompaning the unit will also reflect the circuit value change.

5. The change will not reflect in cost increase to the Government.

[redacted] 25X1

[redacted] 25X1

Project Engineer

ACTION II

Navy Inspector Endorsement:

[redacted] 25X1

Plant Supervisor #114

[redacted] 25X1

ACTION III

Approved by:

Action I approved providing performance equals or betters prototype and specifications standards.

[redacted] 25X1

For the Government

CONFIDENTIAL